

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-2 (Canceled)

Claim 3 (Previously Presented): The method according to claim 21, wherein the predetermined temperature is a temperature of from 200°C to 400°C.

Claim 4 (Previously Presented): The method according to claim 21, wherein the metallic layer is formed on the silicon layer by a long throw sputtering method or a collimate sputtering method.

Claim 5 (Previously Presented): The method according to claim 21, wherein the metallic layer is comprised of titanium, cobalt or nickel.

Claim 6 (Previously Presented): The method according to claim 21, wherein a depth of the silicon region is larger than the first thickness of the metallic layer.

Claim 7 (Previously Presented): The method according to claim 21, wherein the

protective layer is comprised of titanium-nitride or tungsten.

Claim 8 (Previously Presented): The method according to claim 21, wherein the first thickness of the metallic layer is equal to or less than 15nm.

Claim 9 (Previously Presented): The method according to claim 21, wherein the second thickness of the protective layer is equal to or more than 30nm.

Claim 10 (Previously Presented): The method according to claim 21, wherein a source region and a drain region of an MOS transistor are formed in the silicon layer, wherein the metallic silicide layer is formed in the source and drain regions.

Claims 11-20 (Canceled)

Claim 21 (Currently Amended): A method for fabricating a silicon on insulator semiconductor device, comprising:

- preparing a substrate;
- forming an insulating film on the substrate;
- forming a silicon layer on the insulating film;
- heating the substrate to a predetermined temperature;
- forming a metallic layer on the silicon layer of the heated substrate by a straight

sputtering method so as to sputter straightly to the silicon layer, wherein the metallic layer has a first thickness;

forming a protective layer on the metallic layer, wherein the protective layer protects the metallic layer from a surrounding atmosphere and wherein the protective layer has a second thickness greater than the first thickness;

forming a metallic silicide layer in an interface between the silicon layer and the metallic layer under the protective layer by a first heat treatment, so that the metallic silicide layer has a high resistance crystalline structure;

removing the protective layer; and

subjecting the metallic silicide layer to a second heat treatment after said removing the protective layer, so that the metallic silicide layer has a low resistance crystalline structure, ~~and~~ a sheet resistance of about 10 Ω /sq and a thickness of about 30 nm.

Claim 22 (Previously Presented): The method according to claim 10, wherein the MOS transistor also includes a polysilicon gate, said forming a metallic layer comprises forming the metallic layer on the gate, and

wherein the metallic silicide layer is formed in an interface between the polysilicon gate and the metallic layer.

Claim 23 (Currently Amended): A method of manufacturing a silicon on insulator

semiconductor device, comprising:

- preparing a substrate;
- forming an insulating film on the substrate;
- forming a silicon layer on the insulating film;
- heating the substrate to a predetermined temperature;
- forming a metallic layer having an orientation of a (200) surface on the silicon layer of the heated substrate by a straight sputtering method;
- forming a protective layer on the metallic layer;
- forming a first metallic silicide layer on the silicon layer under the protective layer by a first heat treatment, the first metallic silicide layer having a high resistance crystalline structure;
- removing the protective layer; and
- subjecting the first metallic silicide layer to a second heat treatment after said removing the protective layer, so as to change the first metallic silicide layer into a second metallic silicide layer having a low resistance crystalline structure and a thickness of about 30 nm.

Claim 24 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 23, wherein the metallic layer is comprised of titanium, cobalt or nickel.

Claim 25 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 23, wherein the predetermined temperature is a temperature of from about 200°C to about 400°C.

Claim 26 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 24, wherein the metallic layer is comprised of titanium.

Claim 27 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 26, wherein the first metallic silicide layer is a Ti_2Si layer and the second metallic silicide layer is a TiSi_2 layer.

Claim 28 (Canceled)

Claim 29 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 23, wherein a temperature of the first heat treatment is lower than a temperature of the second heat treatment.

Claim 30 (Currently Amended): A method of manufacturing a silicon on insulator semiconductor device, comprising:

providing a substrate;

forming an insulating film on the substrate;

forming a silicon layer on the insulating film;

heating the substrate to a ~~predetermined~~ temperature equal to or higher than about 200°C and lower than about 400°C;

forming a metallic layer on the silicon layer of the heated substrate by a straight sputtering method;

forming a protective layer on the metallic layer;

forming a high resistance metallic silicide layer on the silicon layer under the protective layer by a first heat treatment whereby the substrate is heated to 750°C in a nitrogen gas atmosphere, the high resistance metallic silicide layer having a first crystalline structure;

removing the protective layer; and

subjecting the high resistance metallic silicide layer to a second heat treatment after said removing the protective layer, so as to change the high resistance metallic silicide layer into a low resistance metallic silicide layer having a second crystalline structure.

Claim 31 (Canceled)

Claim 32 (Currently Amended): The method of manufacturing a silicon on insulator semiconductor device according to claim 30, wherein the metallic layer is comprised of

titanium.

Claim 33 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 32, wherein the first metallic silicide layer is a Ti_2Si layer and the second metallic silicide layer is a TiSi_2 layer.

Claim 34 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 32, wherein the metallic layer has an orientation of a (200) surface.

Claim 35 (Previously Presented): The method of manufacturing a silicon on insulator semiconductor device according to claim 32, wherein a temperature of the first heat treatment is lower than that of the second heat treatment.